

2. (Amended) The [active] activated alumina catalyst as defined by Claim 1, said effective amount, expressed by weight of Na_2O , ranging from 1,500 ppm to 2,500 ppm.

3. (Amended) The [active] activated alumina catalyst as defined by Claim 2, said effective amount, expressed by weight of Na_2O , ranging from 1,700 ppm to 2,200 ppm.

4. (Amended) The [active] activated alumina catalyst as defined by Claim 1, further comprising silica and/or at least one oxide of titanium, zirconium, cerium, tin, a rare earth, molybdenum, cobalt, nickel or iron.

5. (Amended) The [active] activated alumina catalyst as defined by Claim 1, further comprising a clay, a silicate, an alkaline earth metal or ammonium sulfate, ceramic fibers, asbestos fibers, or combination thereof.

6. (Amended) The [active] activated alumina catalyst as defined by Claim 1, further comprising cellulose, carboxymethyl cellulose, carboxyethyl cellulose, tallol, a xanthan gum, a surface-active agent, a flocculating agent, a polyacrylamide, carbon black, a starch, stearic acid, polyacrylic alcohol, polyvinyl alcohol, a biopolymer, glucose, a polyethylene glycol, or combination thereof.

7. (Amended) The [active] activated alumina catalyst as defined by Claim 1, comprising extrudates, tablets, or beads thereof.

8. (Amended) The [active] activated alumina catalyst as defined by Claim 7, comprising a plurality of beads having a diameter size ranging from 1.5 mm to 10 mm.

9. (Amended) The [active] activated alumina catalyst as defined by Claim 8, said beads having a diameter size ranging from 3 mm to 7 mm.

10. (Amended) The [active] activated alumina catalyst as defined by Claim 1, deposited onto support substrate therefor.

11. (Amended) A catalyst comprising at least 0.5% by weight of [the active] an activated alumina catalyst [as defined by Claim 1] comprising a cocatalytically effective amount of sodium values, said effective amount, expressed by weight of Na₂O, ranging from 1,200 ppm to 2,700 ppm.

12. (Amended) A catalyst comprising from 60% to 99% by weight of [the active] activated alumina catalyst [as defined by Claim 1] comprising a cocatalytically effective amount of sodium values, said effective amount, expressed by weight of Na₂O, ranging from 1,200 ppm to 2,700 ppm.

13. (Amended) In a catalyzed Claus reaction for the production of elemental sulfur, the improvement which comprises, as the catalyst therefor, [the active] an activated alumina catalyst [as defined by Claim 1] comprising a cocatalytically effective

amount of sodium values, said effective amount, expressed by weight of Na₂O, ranging from 1,200 ppm to 2,700 ppm.

14. (Amended) In a process for the catalyzed hydrolysis of an organosulfur compound, the improvement which comprises, as the catalyst therefor, [the active] an activated alumina catalyst [as defined by Claim 1] comprising a cocatalytically effective amount of sodium values, said effective amount, expressed by weight of Na₂O, ranging from 1,200 ppm to 2,700 ppm.

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15. (Amended) In a process for catalytically removing objectionable sulfur compounds from gaseous effluents comprised thereof, the improvement which comprises, as the catalyst therefor, [the active] an activated alumina catalyst [as defined by Claim 1] comprising a cocatalytically effective amount of sodium values, said effective amount, expressed by weight of Na₂O, ranging from 1,200 ppm to 2,700 ppm.

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--16. The activated alumina catalyst as defined by Claim 1, wherein the catalyst has a specific surface of ^{350 to 370} ~~up to about 360~~ m²/g.

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17. The catalyst as defined by Claim 11, wherein the catalyst has a specific surface of ^{350 to 370} ~~up to about 360~~ m²/g.